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Male-on-Male Sexual Homicide: A Systematic Review

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ABSTRACT

Sexual homicide has been heavily studied, yet the majority of the studies have focused on male offenders killing female victims (MFSH), thereby neglecting male-on-male sexual homicide (MMSH), i.e., instances where an adult male offender murders an adult male victim. To summarize the current understanding of this crime type, a systematic review was conducted. The objective was to provide a clearer picture of MMSH, e.g., how common it is, its modus operandi (i.e., offending pattern), and demographic characteristics of victims and the offenders. Following PRISMA (2009) guidelines, a thorough search of four databases (PsychInfo, PubMed, Web of Science and ScienceDirect) was conducted yielding a total of 165 records. After an in-depth record screening (excluding duplicates and records written in non-English language) 116 records remained. Following a second screening process a total of four full-text empirical articles were eligible for inclusions. The summation of the studies suggests that; MMSH remains a low base rate phenomenon, that motivational differences and a new three-type classification are present within this group, and that differences in offending patterns also exist between MMSH and MFSH. Today's research collectively supports the presence of a suggestive heterogeneity both within MMSH but also within sexual homicide in general.

Keywords: Male Offender, Male Victim, Modus Operandi, Male-on-Male Sexual Homicide, Sexual Homicide

Homicidio sexual de hombre a hombre: una revisión sistemática

RESUMEN

El homicidio sexual ha sido ampliamente estudiado, sin embargo, la mayoría de los estudios se han centrado en delincuentes masculinos que matan a víctimas femeninas (MFSH), descuidando así el homicidio sexual entre hombres (MMSH), es decir, casos en los que un delincuente adulto asesina a un hombre adulto, víctima. Para resumir la comprensión actual de este tipo de delito, se realizó una revisión sistemática. El objetivo era proporcionar una imagen más clara de MMSH, por ejemplo, qué tan común es, su *modus operandi* (es decir, patrón delictivo) y las características demográficas de las víctimas y los delincuentes. Siguiendo las directrices de PRISMA (2009), se realizó una búsqueda exhaustiva en cuatro bases de datos (PsychInfo, PubMed, Web of Science y ScienceDirect) que arrojó un total de 165 registros. Después de una revisión exhaustiva de los registros (excluyendo duplicados y registros escritos en un idioma distinto del inglés), quedaron 116 registros. Después de un segundo proceso de selección, un total de cuatro artículos empíricos en texto completo fueron elegibles para su inclusión. El resumen de los estudios sugiere que; MMSH sigue siendo un fenómeno de tasa base baja, que dentro de este grupo están presentes diferencias motivacionales y una nueva clasificación de tres tipos, y que también existen diferencias en los patrones delictivos entre MMSH y MFSH. La investigación actual respalda colectivamente la presencia de una sugerente heterogeneidad tanto dentro de MMSH como dentro de los homicidios sexuales en general.

Palabras clave: Delincuente masculino, Víctima masculina, *Modus Operandi*, Homicidio sexual de hombre a hombre, Homicidio sexual

男性对男性的性凶杀：一项系统性综述

摘要

性凶杀已被深入研究，但大多数研究都聚焦于男性犯罪者杀害女性受害者 (MFSH)，从而忽视了男性对男性的性凶杀 (MMSH)，即一名成年男性犯罪者谋杀一名成年男性受害者。

为了总结目前对该犯罪类型的认识，进行了一项系统性综述。目的旨在更清晰地理解MMSH，例如其常见程度、作案手法（即犯罪模式）、以及受害者和犯罪者的人口特征。根据PRISMA (2009) 指南，对四个数据库（PsychInfo、PubMed、Web of Science和ScienceDirect）进行了全面检索，总共产生了165条记录。经过一项深度的记录筛选（去除重复记录和非英语记录），剩下116条记录。经过第二次筛选后，共有四篇实证文章（全文）符合研究。研究总结表明：MMSH仍然是一种低基础率现象，该群体内存在动机差异和一项新的分类（分为三类），并且MMSH和MFSH之间也存在犯罪模式差异。本研究共同支持一种暗示性异质性的存在，这种异质性不仅存在于MMSH，还存在于一般的性凶杀。

关键词：男性犯罪者，男性受害人，作案手法，男性对男性的性凶杀，性凶杀

1. Introduction

Globally, the occurrence of sexual homicide is a low base rate phenomenon. Prior studies have estimated that sexual homicides comprise approximately one to five percent of all reported homicides annually (Chan, 2017, Chan & Heide, 2009; Chan & Heide, 2016; James & Proulx, 2014). There are however discrepancies in the reporting rates of sexual homicide which may, at least in part, be due to the inconsistent criteria used in classifying this offense (Chan, 2015; Chan & Heide, 2009). Although sexual homicide rarely occurs, it has been the subject of much research over the years. However, the majority of this research has focused on male-on-female sexual homicides (MFHS, e.g., Chan, Myers, & Heide, 2010; James & Proulx, 2014) thereby neglecting the male offender group who sexually murder male victims (henceforth referred to as male-on-male sexual homicide: MMSH). This is despite the fact that these two offender groups may differ in important ways.

A recent review of the sexual homicide literature (Chan & Heide, 2009), examined 32 published empirical studies, conducted between the mid 1980s to 2008, with the majority of these studies derived from North America. The review highlighted the commonness of comparative studies in the study of sexual homicide offenders and that sexual murderers have often been contrasted with other specific populations, e.g., non-sexual murderers and other violent offenders such as psychopaths and sadists who do not murder their victims (e.g., Stefanska, Beech, & Carter, 2016). The majority of the offenders in their review were adult male sexual offenders of which about half, rather than murdering a specific victim group,

murdered different victim types (i.e., adult women, elderly women, adult men, and children). In the review by Chan and Hide (2009), only six empirical studies from the mid 1980s were conducted on specific type victim types, and only one study was conducted on MMSH.

In view of the gap in the literature on MMSH, the present review aims to further its current scientific understanding by summarizing these studies focusing on its frequency, the modus operandi, typologies as well as the characteristics of the offenders and their victims.

1.1. Definition of Sexual Homicide

Over the past two decades, several definitions of sexual homicide have been proposed by scholars and practitioners (see Chan & Heide, 2009 for a review). Currently, the most widely used definition of sexual homicide in research is (or based on) the one by Ressler, Burgess, and Douglas (1986). This initial comprehensive definition of sexual homicide relies entirely on physical evidence readily available at the crime scene or obtained during the investigation. In order for a murder to be considered sexual, the murder has to include at least one of the following: (a) the victim lacks clothing, (b) exposure of the sexual parts of the victim's body, (c) the body is found in a sexually explicit position, (d) insertion of foreign objects into the victim's body cavity (anus, vagina, or mouth), (e) there is evidence of sexual intercourse, and (f) there is evidence of substitute sexual activity (e.g., masturbation and ejaculation at the crime scene) or of sadistic fantasy (e.g., mutilation of the genitals). Holmes and Holmes (2001) instead define sexual homicide more simply as a combination of lethal violence with a sexual element. In contrast, other studies (Meloy, Gacono, & Kennedy, 1994; Meloy, 2000) argue that for a crime scene to be classified as a sexual homicide, physical evidence of sexual assault or of sexual activity in the immediate area of the victim's body should be present, and/or a legally admissible confession from the offender indicating sexual contact during the murder should be obtained. The latest definition of sexual homicide was introduced by Chan (2015), in which one of the following criteria had to be met to be defined as a sexual homicide: (1). Physical evidence of pre-/peri- and/or post-mortem sexual assault (vaginal, oral, or anal) against the victim. (2). Physical evidence of substitute sexual activity against the victim (e.g., exposure of sexual organs or sexual positioning of the victim's body, insertion of foreign objects into the victim's body cavities, and genital mutilation) or in the immediate area of the victim's body (e.g., masturbation) reflecting the deviant or sadistic sexual fantasy of the offender. (3). A legally admissible offender confession of the sexual motive of the offense that intentionally or unintentionally resulted in a homicide. (4). An indication of the sexual element(s) of the offense from the offender's personal belonging (e.g., journal entries and/or home computer).

1.2 Classifications of Sexual Homicide

Several typologies of sexual homicide has also been previously identified (Beauregard & Proulx, 2002; Beech, Robertson, & Clarke, 2001; Clarke & Carter, 1999; Folino, 2000; Higgs, Carter, Tully & Browne, 2017; Kocsis, Cooksey & Irwin, 2002; Keppel & Walter, 1999; Meloy, 2000; Ressler, Burgess & Douglas 1988). Unfortunately, the various typologies all contain some important limitations (Beauregard, Proulx, Briend, & St.-Yves, 2005; Beauregard, Proulx, Briend, & St.-Yves, 2007; Beauregard & Proulx, 2007). These limitations may concern the number of offenders, victims or both, the source of data (e.g., interviews, surveys, police records and/or databases), the classification method used, and the type of sexual murderer (e.g., by combining serial and single-victim offenders, and/or mixing victim groups).

The most pioneering work in introducing a framework to study sexual homicide and its typologies, was the organized/disorganized typology, which was identified and developed by agents within The Federal Bureau of Investigation (Burgess, Hartman, Ressler, Douglas, & McCormack, 1986; Ressler et al., 1988). Based on a sample of 36 convicted sexual murderers, the FBI proposed a dichotomous typology, the Organized/Disorganized Offender. Using a mixture of crime scene behaviors and background variables (e.g., intelligence, childhood upbringing, familial structure), they developed behavioral profiles. Based on the offender's behavior at the crime scene and his choice of victim, law enforcement inferred personality, developmental, and lifestyle characteristics, which in turn could aid the investigation and apprehension of the offender.

The Organized Offender is the intelligent offender. He carefully plans his offenses, leaves very little evidence at the crime scene, and chooses victims he does not know (Ressler et al. 1989). It is believed that this well-defined script—referring to the offender's knowledge structure or sequence of decision making—represented the Organized Offender's deviant sexual fantasy to kill his victims—sexually sadistic fantasy. In contrast, the Disorganized Offender is believed to instead target familiar victims, not planning his attack and killing out of anger and rage (Ressler et al. 1986). According to the FBI, this disorganized type is unaware of his sexually deviant need to murder his victim. Instead, he acts violently at the time of the offense and situational factors (for instance, if the victim fights back) influence the lethality of the offense.

The FBI's classification has several strengths. For instance, it is readily operationalized, and its definition is broader than other definitions by suggesting that sexual homicide is not exclusively motivated by sadism or lust (Proulx, Beauregard, Cusson, & Nicole, 2007). Another strength is that this classification does not assume that sexual homicides are premeditated acts from the beginning. Instead, it allows for the situation to affect the offenders' behavior and to influence the outcome (Mieczkowski & Beauregard, 2010). As pointed out by Higgs et al. (2017), there are also numerous limitations apparent within this framework. For instance,

the FBI dichotomy has a weak methodology, e.g., a lack of standardized interview procedure and their categorization of offenders is based on the crime phase and crime scene behaviors. Another limitation is that the development of the typology contains a sampling bias in that they have an over-representation of serial murders. Those who commit one or two sexual homicides might differ markedly from those who commit multiple sexual homicides. Limitations such as these therefore collectively decreases the validity of any findings based on this typology (Beauregard & Proulx, 2002, Meloy, 2000; Salfati & Taylor, 2006). Nonetheless, the FBI typology has been partially supported by empirical research (e.g., Canter, Alison, Alison, & Wentink, 2004). For instance, similar to the FBI typology, Beauregard and Proulx (2002, see also Proulx, Beauregard, Cusson, & Nilcoe, 2007) found evidence for two types of sexual murderers—the sadistic type and the angry type, which in many respects resemble the FBI's Organized and Disorganized Offenders, respectively. On the other hand, additional research has identified additional types of sexual murderers (Beech, Fisher & Ward, 2005; Beech, Oliver, Fisher, & Beckett, 2006). For instance, unlike the FBI, Beech et al. (2006) identified three distinct types of sexual murderers: (i) the calculated pain infliction, (ii) the grievance driven murderers, and (iii) the rape plus murder group. Interestingly, both the calculated pain infliction and grievance driven groups shared resemblance both with the FBI's Organized/ Disorganized Offender types, as well as with Beauregard's typologies of a sadistic /angry offender type.

Taken together, the literature on sexual homicide suggests that there may be different types of sexual homicide offenders or different pathways to sexual homicide. This is supportive of suggestive heterogeneity within sexual homicide (Beauregard et al., 2005; Healey et al., 2016) in general, without a further inspection of e.g., the victim groups.

1.3 Classifications of Male-on-Male Sexual Homicide

Sexual homicide with male victims by male offenders corresponds to the same definition of sexual homicide as presented by Ressler et al. (1988). The first typology specifically for MMSH was presented in 1996 by Geberth. It suggested a six-type classification of what he referred to as homosexual homicide: (1) interpersonal violence-oriented disputes, (2) murders involving forced anal rape and/or sodomy, (3) lust murder, (4) homosexual serial murders, (5) robbery and/or homicide of homosexuals, and (6) homophobic assaults and gay bashing. Importantly, the last three types are motivated by power, financial gain, or hate, rather than sex.

In Geberth's (1996) study, interpersonal violence-oriented disputes were the most common type of sexual murder of men and they were often the result of disputes between partners, ex-partners, or love triangles. The murder may have been triggered by instances where ground rules were not respected by one of the men involved in the sexual activity. Also, these homicides may be committed in a

context of prostitution, where the prostitute or hustler denies being a homosexual and responds with extreme violence to this threat of his masculinity.

The second type of homicide identified describes homicides involving forced anal rape and/or sodomy. Although these murders were usually sexually motivated, there was no sexual gratification associated with the killing. Instead, death occurred mainly from the amount of force used to overcome the victim's resistance or to prevent identification.

Lust murder, the third type of homicide (Geberth, 1996), often entailed evidence of sadism and mutilation to the victim's genitals, and the crime was meticulously premeditated according to the deviant sexual fantasies of the offender. Also, the offender himself exhibits several characteristics in line with Hare's (1993) description of a psychopath i.e., cunning, superficially charming, and callous.

The fourth type of homicide identified was referred to as the homosexual serial murderers. These offenders hunt for vulnerable and easy to control victims, often children and prostitutes. This type of homicide involves lust murders, thrill killings, child killings, and robbery homicides which were homosexually oriented. They could be characterized by acts of mutilation and dismemberment of the victim's bodies in order to facilitate its transportation or simply to prevent identification of the victim. According to Geberth (1996), sex was secondary for this type of offenders. Instead, control and power over the victim were the main motivations. Three subtypes of homosexual serial murders have further been distinguished by Geberth (1996): (i) the homosexual serial killer who exclusively targets other male homosexual victims, (ii) the homosexual-oriented serial killer who attacks heterosexual and homosexual victims, and (iii) the male pedophile homosexual serial killer who attacks young boys and men.

In the fifth type, the robbery and/or homicide of homosexuals, the offenders hunted for potential victims engaging in high-risk behaviors (e.g., cruising), and they search in locations known to be frequented by homosexuals (e.g., gay bars, saunas). Some, either alone or in a group, would use homosexual prostitution as a vehicle to assault or rob a gay customer who is willing to pay to have sex.

The sixth type identified by Geberth (1996) was the homophobic assaults and gay bashing type. These incidents were performed by individuals showing an intense hatred for homosexuals.

As with the above stated definitions of sexual homicide, Geberth (1996) typology is not without limitations. First, the sample which was used to develop the typology was not described. Second, the variables included are limited to the crime scene, hence neglecting the pre-crime phase as well as the characteristics of the offenders. Despite the various limitations of the current typologies, they have advanced the research on MMSH and continue to help researchers and others to better understand conditions and/or factors that may be present in this crime

type. Nonetheless, the scant research remains a problem for furthering our understanding of this particular crime type. The aim of this review is to summarize the current knowledge of MMSH and thereby provide a clearer picture of this understudied crime type.

2. Method

This study was conducted in accordance with the PRISMA guidelines (Moher, Liberati, Tetzlaff, Altman, & Group, 2009). Articles published in English peer-review journals were included if they principally focused on homicide in general, and/or sexual homicide in particular. Although not all publications had to concentrate on the concept of MMSH, it had to be mentioned and to some degree explored in the study in order to be included.

The following four databases were used to identify all published studies from inception to January 1, 2019 (Appendix): PsychInfo, PubMed, Web of Science and ScienceDirect. The search made for each database included the terms “sexual homicide,” “sexual murder,” “lust murder,” “lust homicide,” “male-on-male sexual homicide,” “male-on-male sexual murder,” “sexual killing,” “sexual murder,” “homosexual murder,” “homosexual homicide,” and “male victim.” When permitted, “non-sexual murder,” “non-sexual homicide,” “child victim,” “boys,” and “girls” were terms that were excluded from the database search. Studies only focusing on sexual homicides in general and/or if it was impossible to extract any type of information on male victims killed by male offenders separate from female victims, were excluded.

Initially, all titles and abstracts of articles discussing MMSH were screened, and those deemed compatible with the objectives of the study were further reviewed. Information from included publications were extracted regarding the focus of the study, as well as data discussing MMSH with respect to rates, modus operandi (e.g., offending patterns including typologies), and offender-, and victim demographics. All included publications were then compared to each other.

3. Results

3.1 Study Selection

The study selection and inclusion are shown in the flow diagram (Figure 1). A total of 165 articles were initially identified and screened, of which five were deemed to be eligible for inclusion. One publication previously deemed eligible in the search was later excluded for failing to meet the objectives of the study. Four papers were included in the final review.

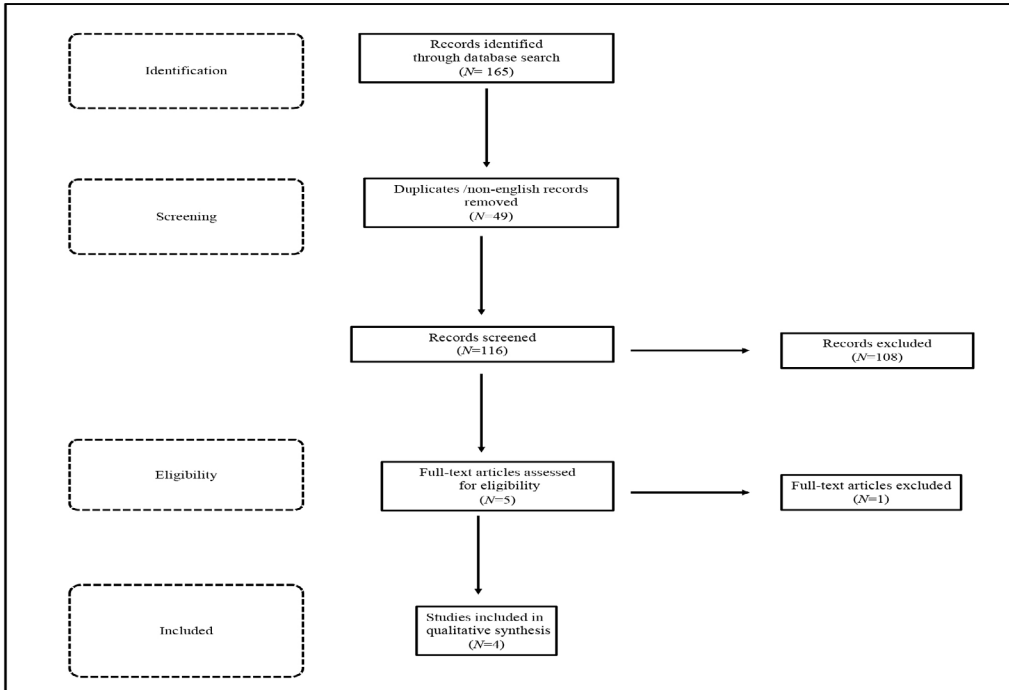


Figure 1. PRISMA flow diagram over study selection and inclusion.

3.2 Focus of Studies

The included publications in this study are original articles that principally focused on criminology and sexual abuse. Only one of the publications concentrated on the concept of MMSH, but it was mentioned and to some degree went viral in the remaining studies. The study's characteristics and the most important findings of the included studies are presented in Table 1. The studies were conducted between 2007 and 2019 in four countries: two studies conducted in the USA, one in Canada and one in China. A total of 5,774 sexual homicide victims were included in the studies, of which 1021 (17.7%) were victims of male-on-male sexual homicide. The articles all had a different focal point regarding sexual homicide (e.g., the choice of weapon used and whether the offender mutilated the victims or not). The included studies (limited to their mentioning of MMSH) are presented below in chronological order.

Table 1. Study characteristics and main findings of the included studies

Author(S)	Focus of study	Type of article	Country	Data source	Year span	Sample Size	SH definition based on	Variables	Statistical approach	Study aim	Main findings
Beauregard & Proulx (2007)	Offender Therapy and Comparative Criminology	Original article	Canada	Police reports, interviews, institutional files, autopsy reports, crime scene info	1998 – 2000	10 of 60 SH (16.7%)	Ressler, Burgess, & Douglas (1988)	Offender Demographics (i.e., age, marital status, academic degree, living situation, drugs/alcohol, sexual orientation) Victim Demographics (i.e., age, race, work type, living situation, drugs/alcohol, sexual orientation) Criminal Career Variables (2): Occupational problems, relational problems. Offender Criminal Antecedents (4): - property crimes, nonsexual violent crimes, sexual crimes, more than one type of crimes)	Descriptive statistics of MSHO who murdered male victims	To improve the current knowledge of sexual murderers of men by describing a group of men who killed another man in sexual context. Based on this information they aimed to develop a new classification of male-on-male SH.	Proposed a new classification of three distinctive types of male offenders who murder male victims: the avenger, the sexual predator and the nonsexual predator. Their results are discussed in relation to routine activity theory (RAI).
Chan & Beauregard (2016)	Investigative Psychology and	Original article	USA	FBI's SHR Offender/victim demographics,	1976 – 2011	467 of 2472 SH (18.9%)	Burgess, Hartman, Ressler, & Douglas &	Offender Demographics (i.e., age group, race)	Chi-square Automatic Interaction	To examine possible interactions between victim	MSHO choose weapon type according to some

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Offender Profiling	Original article	USA	FBI SHR Offender data, offense data (demographics of offender & victims, characteristics of homicidal incident reports	1976 – 2012	535 of 3160 SH (16.9%)	Chan (2015), Ressler, & Burgess, & Douglas (1988)	McCormack (1986)	Victim demographics (i.e., age group, race, gender Murder weapon type (2): -Edge weapon (i.e. different types of knives) -Personal weapon (e.g., beating, asphyxiation, strangulation, drowning) Geographical Urbanness (2): -More populated (i.e. large and small cities, > 2500 citizen) - Less populated (suburban and rural areas)	Detector (CHAID), Conjunctive analysis (OR)	characteristics and the choice of weapon type by male SHO.	victim characteristics. An edge weapon (knife) was preferred by male SHO when their victim was a male victim, especially those who were from a different racial background. A personal weapon was preferred by MSHO when their victim was perceived to be physically weaker than they were (e.g., children/adolescents) of both sexes, especially those from a different racial background.
Chan, Heide & Beauregard (2019)	Sexual Abuse							Offender demographics (4) (i.e., gender, age type, age group and race Victim Demographics (4): (i.e., gender, age group victim type by age/gender, race) Murder Weapon Type (4): - Personal weapon (i.e. killing with hands), - Contact weapon	Cross tabular Chi- square (X^2) analysis, independent t-tests, Measures of association (Phi, Cramer's V)	Exploring the difference between male (N=3009) and female (N=151) SHO with respect to their use of weapons in killing their victims.	Male SHO used more personal weapons and female SHO used more firearms in their crime commission. Different trends were found in regards to murder weapon used by male and female SHO from different age groups. The type of weapon used by SHO was in part influenced by victim characteristics. Female SHO mostly

Chan & Li (2019)	Sexual abuse	Original article	China (regions: Shanghai, Wuhan, Guangdong)	A. Police data (i.e., crime data, death scene investigation records, suspect interrogation records, autopsy reports) B. Chinese online journal databases	1988 – 2018 (A: 2004 – 2018, B: 1994 – 2018)	9 of 82 SH (11.0%)	Chan (2015)	(i.e. blunt objects), - Edge weapon (i.e. knives) - Firearms (i.e. shotguns) Murder Weapon Group (2): - More physically demanding (i.e. personal/contact weapons) - Less physically demanding (i.e. edge weapon/firearms)	Exploring offending characteristics of male (N=30) and female (N=1) SHO who mutilated their victims and to compare their MO with non-sexual murderers.	used physically less demanding weapons. Males more likely to use physically more demanding weapons, consistent with the Physical Strength Hypothesis. When the victim is male and an adult, the probabilities of the victim to be murdered by a physically more demanding weapon was low.
								Offender Demographics (7) (i.e., age, sex, marital status, education, employment, previous convictions, previous sexual convictions)	Cross tabular Chi-square (X ²) analyses and Fisher's exact tests. Measures of association (Phi, Cramer's V)	SHO who mutilate their victims were more likely to have previous sexual offense convictions. SHO who mutilate their victims were mostly motivated by sex and least motivated by financial gain. Victim abduction prior to the offense was more often reported in non-mutilation SH.
								Victim Demographics (4): (i.e. age, sex, marital status, employment)		No differences between M-FSH and M-MSH when comparing mutilated and non-mutilated SH cases
								Offence Characteristics (MO) (12): (i.e., nature of the homicide, time of day, offence location, previous sexual offence convictions, offenders primary motivation,		

[illegible]

3.3 Literature Review

3.3.1 Classifying Sexual Homicide Against Men

The descriptive study by Beauregard and Proulx (2007) introduced a comprehensive and research-oriented classification of MMSH. To qualify for the study, the offenders had to meet at least one criterion of the definition of a sexual homicide used by Ressler et al. (1988). Although their data did not allow for statistical analyses to be conducted, an exploratory analysis of 10 offenders successfully distinguished sexual murderers who murder males into three categories.

The first type, the Avenger, corresponded well to Geberth's (1996) interpersonal violence-oriented disputes and assaults type. These offenders were usually involved in prostitution activities and could be of any sexual orientation. The consumption of drugs and alcohol were important features of the Avenger. Before escalating to murder, he had often been convicted of property crimes as well as violent crimes. They also reported having experienced psychological, physical, and sexual abuse as children. The sexual activity requested by the client in a prostitution context, or a triggering event during or after the sexual exchange, suggestively triggered memory from the abuse, unleashing immense rage within the offender and resulting in the murder itself. This type of sexual homicide was suggested to be preceded by anger and often committed by strangulation or the use of a weapon (of opportunity, i.e., phone cord).

The Sexual Predator was instead mainly motivated by deviant sexual fantasies, and therefore corresponds to the lust murderer of Geberth's typology (1996). He is homosexual in his sexual orientation, and he presents criminal antecedents of sexual crimes, primarily against male children or adolescents. The sexual assault and the homicide are considered premeditated. In many cases the victim is an adolescent or young man (not necessarily of homosexual orientation), unknown to the offender. The offending process begins with the abduction and/ or confinement of the victim, and sadistic acts, e.g., mutilations, sodomy, and humiliation, are all performed during the crime. Expressive violence is found on the victim's body, and the crime committed often lasts more than 30 minutes and up to 24 hours.

The third type presented by Beauregard and Proulx (2007) was the Nonsexual Predator. This type corresponds to the robbery and/or homicide of homosexuals as previously described by Geberth (1996). The primary motivation to commit the crime is to rob the victim. It is therefore often described as a robbery that escalates into murder because of the victim's resistance. The authors conclude that this offender uses the visibility and the homosexual orientation of the victim to seduce him and to bring him to an isolated area where he will be able to commit his crime without interference. The victim is presumably selected based on his vulnerability, easy access, and visibility. The offender himself may or may not be

homosexual in orientation, and he may act alone or together with an accomplice. The violence is instrumental as it serves to commit the burglary and to overcome the victim's resistance (hence in order to achieve a goal), whereas the sexual contact instead serves to trap the victim. In contrast to the previous (Sexual Predator) type, the duration of the crime is typically short. In accordance with the first type of offender (the Avenger), he may use alcohol or drugs prior to the crime and these types of offenders often have diversified criminal careers (with an emphasis on property crimes). The authors suggested that homosexual men are victimized mainly because of their situational vulnerability and the theoretical framework of routine activity was suggested to be directly applicable to MMSH.

3.3.2 Choice of Weapon Used in Sexual Homicide

Based on Burgess et al. (1986) definition of sexual homicide as the "killing [of] another in the context of power, control, sexuality and aggressive brutality" (p.252), Chan and Beauregard (2016) hypothesized that the choice of weapon type made by (single-victim) male sexual offenders (being a personal weapon, an edge weapon or another weapon type) would, in part, be influenced by the characteristics of the victim. Of their total sample of male offenders, only a minority constituted male victims (18.9%).

They first examined the choice of using a knife (an edge weapon) to commit a sexual homicide. The results showed that the most important predictor was victim age, with male offenders being more likely to use a knife to kill an adult than a non-adult (male or female) victim. Results also showed that male offenders who target an adult male victim (MMSH) from a greater geographically populated area (i.e., cities with a population of at least 2,500) were more likely to commit the murder using a knife. Offenders targeting non-adult victims were more likely to use a different weapon during the crime. The second analysis on the choice of killing with their own hands (a personal weapon) showed that the most important predictor was the victim's gender (rather than age). In MFSH offenders were more likely to kill with their own hands as compared MMSH. Offenders who target a non-adult female (MFSH) were also more likely to kill with their own hands, as compared to adult MMSH.

Results furthermore revealed that offenders were more likely to use a knife on male victims, those of a different race and if the victim was a stranger non-adult (OR=2.41) or not a stranger adult (OR=2.18). The offenders were least likely to use a knife during the commission of the crime when the victim was male, non-adult, not a stranger but of a different race from the perpetrator (OR=0.24). For killing with their own hands, the most likely combination was that the victim was male, non-adult, not a stranger, but of a different race than the offender (OR=3.55). The least likely combination was that the victim was male, not an adult but a stranger and of a different race than the offender (OR=0.15). The geographical urbanness

of the offense was also examined. Focusing on the odds of a decision to use a knife, the most likely combination was that the victim was male, non-adult, a stranger, of a different race than the offender and from a more populated area ($OR=7.24$). The male offenders were the least likely to use a knife when the victim was a male, a stranger and of a different race than the offender, and when the crime was committed in a less populated area ($OR=0.14$). Concerning the decision to kill with their own hands, the most likely combination was that the victim was male, non-adult, not a stranger, of a different race than the offender and from a more populated area ($OR=11.99$). Male offenders were least likely to kill with their own hands when the victim was male, adult, a stranger, of a different race than the offender and when the crime was committed in a more populated environment ($OR=0.05$).

3.3.3. Gender Differences for Weapon Preferences in Sexual Homicide

A similar study was conducted a few years later by Chan, Heide and Beauregard (2019) using Ressler et al. (1988) and Chan's (2015) definition of sexual homicide. Their study also aimed to examine the choice of weapon used by comparing male to female sexual homicide offenders. Of their total sample of cases included in the study (3160) 535 cases constituted MMSH. Four weapon types were examined: personal weapons (i.e., killing with hands and feet, strangulation, beating with bare hands, asphyxiation, drowning and defenestration), contact weapon (i.e., blunt objects), edge weapon (knives), and firearms (i.e., handgun, shotgun, and rifle). The weapon types were also divided into two weapon groups: those more physically demanding (i.e., personal or contact weapons) or those physically less demanding (i.e., edge weapon or firearms). Results showed a significant group difference for the type of weapon that was used by a male versus female (single victim) offenders in murdering different sex of victims. Relative to female offenders, male offenders were more likely to use weapons that were physically more demanding (personal and contact weapons) in killing of victims of the opposite sex ($\Phi = -.10$). Female offenders were more likely than male offenders to use weapons that were physically less demanding (e.g., edge weapons and firearms) in killing victims of the opposite sex ($\Phi = -.42$). Further analyses indicated that male offenders ($B=0.79$) were more likely to use an edge weapon in killing their victim, whereas male victims ($B=-.026$) were less likely to be killed by an edge weapon in sexual homicide. They also examined the effects of offender and victim demographics on weapons that were physically more demanding in killing their victims. Their results showed that male offenders ($B=1.50$) were more likely to use weapons that were more physically demanding. These weapons were less likely to be used in cases of male and adult victims ($B=-1.13$, and $B=-.83$ respectively).

3.3.4. Mutilation of Victims in Sexual Homicide

The most recent study included in this review (Chan & Li, 2019) examined the offending characteristic of sexual homicide offenders who mutilated their victims,

comparing their MO with non-mutilation sexual homicide offenders. To be included in their sample, one of Chan's (2015) previously stated sexual homicide definitions had to be met. Of the total 82 sample of offenders, nine cases concerned MMSH. Of these cases, only three were identified as cases of mutilation (33.3 %) and six cases without mutilation, (66.7%). Of interest for the current study was that their results did not reach significant levels when comparing MMSH to MFSH mutilation and non-mutilation cases ($X^2 = .09$, $(SD=1)$, $\Phi/Cramers V = .03$). Hence, their findings indicated that there are no differences between MFSH and MMSH concerning whether the body was mutilated or not. The article included no further discussion on the concept of MMSH separate from MFSH. However, overall, the most commonly used methods to mutilate the victim bodies (male or females) before and after the death was the following: most offenders (29%) slashed or cut the victim's erogenous organs (e.g., breasts, vagina, and anus). The slashing or cutting of the victim's non-erogenous organs (e.g., hands, feet, and other body parts) was also frequently reported (25.8%), followed by the postmortem mutilation act of necrophilia (e.g., raping the corpse, 19.4%), and acts to damage the body (e.g., burning and scattering foreign objects of the victims' body, 19.4%). Acts of overkill were the least reported (e.g., multiple stab wounds, 6.4%). However, existing literature suggest that mutilation is rarely observed in sexual killings where monetary benefit is the primary motivation. In this type of sexual homicide committed by males, sex is only used as a means to gain trust from the victim for financial gain, especially in MMSH, as pointed out above (Beauregard & Proulx, 2007; Chan, Li, Liu, & Lu, 2019; Geberth, 1996).

4. Discussion

The intent of this systematic review was to summarize the current knowledge of MMSH focusing on its frequency in order to identify the possible offending patterns as well as characteristics of the offenders and their male victims. The studies included in this review all discuss the concept of male victims to some extent but none of them provided detailed statistical analyses on this particular topic. In addition, this review consists of four studies therein reflecting the scant research on this crime type. Such limitations present a serious drawback for any conclusions to be drawn. For instance, although one of the four studies focused specifically on the concept of male victims, it was limited to a descriptive methodology due to their small sample size. In addition, none of the remaining three studies presented considerable information on the male victim type separate from females. However, an important point to be made is that the majority of the studies included in this current study were published after the year 2000, illustrating a growing interest in this particular crime. Notwithstanding these limitations the following could be concluded.

4.1. Frequency of Male-on-male Sexual Homicide

Sexual homicide is not a frequent type of crime and MMSH is even more rare (Chan, 2017; Chan & Heide, 2009; Chan & Heide, 2016; James & Proulx, 2014). This becomes apparent when focusing on the percentage of this crime type in relation to all sexual homicides reported in these articles. Of the total 5,774 sexual homicides reviewed in the four publications, 17.7 percent (N=1021) consisted of MMSH. This supports the traditional statement that the majority of victims in sexual homicides are female (and that the crimes are primarily committed primarily by men). Interestingly, one of the studies (Chan, Heide, & Beauregard, 2019) also reported the number of female offenders with female victims. Of their total sample (N=3160, of which 535 offenders were male who murdered male victims) only 17 cases consisted of female offenders who sexually murdered female victims. Hence, in a relative manner, 17.7% MMSH could here be regarded as a high number. Perhaps this is due to improved definitions of sexual homicide as well as the increased attention of MMSH in particular.

4.2 Modus Operandi in Male-on-male Sexual Homicide and in Contrast to Female Victims

The summation suggests that offending pattern within MMSH differs, that male victims (as compared to female victims) are killed in a particular way by male offenders and that offenders who murder males exhibit different motivations for committing this type of crime.

The studies by the above presented authors also point towards differences in offending pattern within sexual homicide in general, concerning what type of weapons male offenders are more likely to be used on male versus female victims (Chan & Beauregard, 2016; Chan, Heide & Beauregard, 2019). For instance, knives appear to be preferred by male offenders when targeting a male, especially males from a different racial background (interracial killings). Personal weapons were instead preferred by male offenders when their victim was perceived to be weaker than they were, such as children and adolescents of both sexes and again especially those from a different racial background (Chan & Beauregard, 2016). For adult male victims, more physical strength is presumably needed for the kill (in line with the physical strength hypothesis (Chan & Heide, 2008; Chan, Heide, & Beauregard, 2019)). Using a personal weapon, e.g., killing with their hands (or other types of physically more demanding ways) may therefore not be a practical option. Instead, weapons that require less strength to operate, such as firearms may be more viable in killing an adult man. It can also be concluded that when focusing on whether the victim's body was mutilated or not, there does not appear to be any difference between MFSH and MMSH (Chan & Li, 2019).

4.3. Demographic Characteristics of the Male victim and the Male Offenders in Sexual Homicide and in Contrast to Female Victims

The majority of the studies herein reviewed did not report offender and/or victim characteristics separately for MMSH and MFSH hindering an extensive depiction of such demographics. Nonetheless, male victims of sexual homicide appear to be older than their male offenders (Beauregard & Proulx, 2007) yet whether male victims of male sexual homicide offenders are older or younger than female victims remain unknown. The findings that the male victims are older than their male offender are however in line with studies on homosexual violence in that that victims of homosexual sexual homicide tend to be older than their offender (Tremblay, Boucher, Ouimet, & Biron, 1998).

The consumption of alcohol and drugs among most of the offenders described by Beauregard and Proulx (2007) acts as a form of disinhibition leading to offenders acting angry and violently, thus resulting in impulsive behavior. It is however also possible that these offenders use their intoxicated state as an excuse to commit the crime (Amir, 1971). The consumption of alcohol and/or drugs prior to the commission of the killings has been shown in previous studies on MFSH (Beauregard & Proulx, 2002). The majority of the offenders described by Beauregard and Proulx (2007) also appeared to have a criminal antecedent prior to committing the sexual homicide and almost all crimes committed by their offenders were premeditated. Such evidence is in line with previous studies on MFSH (e.g., Nicole & Proulx, 2005). The results by Chan and Li (2019), suggesting that no difference existed between MMSH and MFSH concerning whether the body was mutilated or not, further emphasizes similarities between MMSH and MFSH. Furthermore, offenders of MMSH appear to exhibit a variety of motivating factors, some of which were motivated by rage, other factors by financial gain or sadistic fantasies. Interestingly, revenge and profit are motivations that have not been found in MFSH. As noted by Beauregard and Proulx (2007), motivations such as revenge and profit appear to be context-related, for instance financial difficulties or prostitution. This stresses the importance of looking at the entire criminal event in sexual homicide.

5. Conclusion

The aim of this review was to summarize the current research on MMSH. The afore-mentioned studies herein reviewed collectively indicates different patterns of offending within a male victim group but also as compared to a female victim group. Hence, this review supports a suggestive heterogeneity within sexual homicide more generally and in particular MMSH. For a better understanding regarding the nature of and the degree of such differences, more research is needed on both MMSH and MFSH. Such improvement must also address the limita-

tions that still exists within this field of research. First, a byproduct of the lack of a standardized definition and inconsistent criteria used in classifying the offence (Chan, 2015; Chan & Heide, 2009), is the relatively few numbers of published empirical studies of MMSH. In addition, and already noted in the existing literature, most studies on sexual homicide have used female victims. This introduces a serious gender bias. Other research has used mixing victim groups (i.e., without separating male from female victims) which hinders reliable conclusions to be drawn regarding possible differences and similarities that may exist within MMSH, as well as between MMSH in contrast to MFSH. There is a tremendous value in studying offenders who target specific victim groups and compare them to each other. However, while mixing victim types may be necessary to increase power in the analysis, it limits the extent to which any conclusions can be drawn. Other issues concerning potential biases are introduced with the use of incarcerated sexual murderers (Beauregard & Proulx, 2007).

This field of research may furthermore benefit from studying distinctive sets of psychological characteristics, methods of killing and motivational and situation factors in both MMSH and MFSH. It may also be beneficial to clarify what specific mental issues, e.g., personality disorders and other maladaptive personality traits (Sturup, Rode, Karlberg, von Vogelsang, Rying, & Caman, 2018), are prevalent among offenders of MMSH as compared to MFSH. Hence, not limiting the research to the criminal event but also including the clinical descriptions of the offenders. When using clinical features of the offenders in both MMSH and MFSH (e.g., focusing on their personality characteristics, motivations, and *modus operandi*) descriptive clinical features should preferably be compared with a healthy control group consisting of a nonoffending population. Without such a population, it is not possible to conclude that the prevalence of aberrant offender characteristics in sexual homicide in general, MMSH as well as MFSH, significantly differ from the “normal” population. Future studies will hopefully also continue to investigate differences between sexual homicides committed by men on children (e.g., Beauregard, Stone, Proulx, & Michaud, 2008) versus men and how female sexual homicide offenders (Chan & Frei, 2013; Chan, Frei, & Myers, 2013) who target females differ from MMSH. In addition, it remains a question for future studies to address the frequency of sexual homicides by men against men in Europe, since the data from these studies originated from China, the USA, and Canada.

Conflict of Interest

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APPENDIX

As illustrated in Table 1A, a thorough search of four databases was conducted during identification. Collectively, 165 records were retrieved in the identification step.

Table 1A. Identification

Database	Advanced Search type	Included words	Excluded words	Time period	Document type	Text availability	Language	Subject	Age	Total records identified
PubMed	Title/ Abstract	Sexual homicide Sexual murder Lust homicide Lust murder Male-on-male sexual homicide Male-on-male sexual murder Sexual killing Thrill killing Homosexual homicide Homosexual murder	Children Boys Girls	1900-01-01 to 2019-01-01	Journal article	Full text	English	Human	19+	53
Science Direct	Abstract, keywords or author- specified keywords	Sexual homicide Sexual murder Lust homicide Lust murder Male-on-male sexual homicide Male-on-male sexual murder Sexual killing Thrill killing Homosexual homicide Homosexual murder	Children Boys Girls	1900-2019	Research articles	*	*	*	*	21

PsycInfo	Abstract (Title)	Sexual homicide Sexual murder Lust homicide Lust murder Male-on-male sexual homicide Male-on-male sexual murder Sexual killing Thrill killing Homosexual homicide Homosexual murder	*	1900-01-01 to 2019-01-01	Articles in scholarly journals	Full text Peer reviewed	English	Human	*	14 (6 identical)
Web of Science	Title	Sexual homicide Sexual murder Lust homicide Lust murder Male-on-male sexual homicide Male-on-male sexual murder Sexual killing Thrill killing Homosexual homicide Homosexual murder	Children Boys girls	1975-2019	Article (Early access)	*	English	*	*	77
Total number of records identified (Stage 1)										165

Appendix Table 2A illustrates the subsequent screening step. Based on the total records recognized in the identification stage ($N=165$) the records were first screened for duplicates ($N=46$) as well as records written in other than in English language ($N=3$). An in-depth screening of the remaining records ($N=116$) was thereafter conducted. This resulted in additional exclusions of records based on abstract content and a review of the method and result section ($N=109$). Once the entire screening process was completed, a total of four records remained.

Table 2A. Screening

Exclusion Type	Database				Total Exclusions
	PubMed ($N=53$)	Science Direct ($N=21$)	Psych Info ($N=14$)	Web of Science ($N=77$)	
Duplicates	9	0	0	37	46
Language	0	3	0	0	3
Content (abstract)	40	18	14	37	109
<i>Total Exclusions</i>	<i>52</i>	<i>21</i>	<i>14</i>	<i>74</i>	<i>161</i>
<i>Total Inclusions</i>	<i>1</i>	<i>0</i>	<i>0</i>	<i>3</i>	